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Sommario/riassunto	This book highlights recent developments in lab-on-a-chip technologies and wearable sensors for smart healthcare, integrating several sophisticated multidisciplinary domains. The developed structures presented here are all categorized based on features that are particularly relevant to applications in biotechnology, biosensing, electrochemistry, molecular simulation for sensing applications, biomedicine, diagnostics, analytical biochemistry, polymers for nanotechnology, self-sensing intelligent microrobots, and wearable sensor development for telemedicine healthcare.